



Test Report No.: FM170927N027

RF EXPOSURE REPORT

Applicant	DEI Sales, Inc., dba Polk Audio
Address	1 Viper Way Vista, California 92801, USA

Manufacturer or Supplier	DEI Sales, Inc., dba Polk Audio
Address	1 Viper Way Vista, California 92801, USA
Product	Home Theater Sound Bar System
Brand Name	Polk
System Model	COMMAND SYS US-CAN
Test Model	COMMAND SOUND BAR
Additional Model & Model Difference	N/A
Date of tests	Nov. 11, 2017 ~ Dec. 08, 2017

- ☒ FCC Part 2 (Section 2.1091)
☒ KDB 447498 D01
☒ IEEE C95.1

CONCLUSION: The submitted sample was found to COMPLY with the test requirement

Tested by Harry Li Project Engineer/ EMC Department	Approved by Glyn He Supervisor/ EMC Department
	 Date: Mar. 28, 2018

This report is for your exclusive use. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission. This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Our report includes all of the tests requested by you and the results thereof based upon the information that you provided to us. You have 60 days from date of issuance of this report to notify us of any material error or omission caused by our negligence, provided, however, that such notice shall be in writing and shall specifically address the issue you wish to raise. A failure to raise such issue within the prescribed time shall constitute your unqualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents. Unless specific mention, the uncertainty of measurement has been explicitly taken into account to declare the compliance or non-compliance to the specification

Bureau Veritas Shenzhen Co., Ltd.
Dongguan Branch

No. 34, Chenwulu Section, Guantai Rd., Houjie
Town, Dongguan City,
Guangdong 523942, China

Tel: +86 769 8593 5656
Fax: +86 769 8593 1080
Email: customerservice.dg@cn.bureauveritas.com

TABLE OF CONTENTS

RELEASE CONTROL RECORD	3
1. CERTIFICATION.....	4
2. RF EXPOSURE LIMIT	5
3. MPE CALCULATION FORMULA.....	5
4. CLASSIFICATION	5
5. ANTENNA GAIN	6
6. CALCULATION RESULT OF MAXIMUM CONDUCTED POWER.....	6



Test Report No.: FM170927N027

RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
FM170927N027	Original release	Mar. 28, 2018



Test Report No.: FM170927N027

1. CERTIFICATION

PRODUCT: Home Theater Sound Bar System

BRAND NAME: Polk

SYSTEM MODEL: COMMAND SYS US-CAN

TEST MODEL COMMAND SOUND BAR

ADDITIONAL MODEL: N/A

FCC ID: WLQAM9642TX

TEST SAMPLE: ENGINEERING SAMPLE

APPLICANT: TCL Technoly Electronics(Huizhou) Co., Ltd

TESTED DATE: Dec. 08, 2017

STANDARDS: FCC Part 2 (Section 2.1091)
KDB 447498 D01
IEEE C95.1

2. RF EXPOSURE LIMIT

LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

FREQUENCY RANGE (MHz)	ELECTRIC FIELD STRENGTH (V/m)	MAGNETIC FIELD STRENGTH (A/m)	POWER DENSITY (mW/cm ²)	AVERAGE TIME (minutes)
LIMITS FOR GENERAL POPULATION / UNCONTROLLED EXPOSURE				
300-1500	...	...	F/1500	30
1500-100,000	...	...	1.0	30

F = Frequency in MHz

3. MPE CALCULATION FORMULA

$$P_d = (P_{out} * G) / (4 * \pi * r^2)$$

where

P_d = power density in mW/cm²

P_{out} = output power to antenna in mW

G = gain of antenna in linear scale

π = 3.1416

R = distance between observation point and center of the radiator in cm

4. CLASSIFICATION

The antenna of this product, under normal use condition, is at least 20cm away from the body of the user. So, this device is classified as **Mobile Device**.

5. ANTENNA GAIN

The antennas provided to the EUT, please refer to the following table:

Frequency Band	Antenna 0 Peak Gain (dBi)	Antenna 1 Peak Gain (dBi)	Total Gain (dBi)	Antenna Type
Wi-Fi 2.4GHz	3.65	/	3.65	FPC Antenna
BT 2.4GHz	2.88	/	2.88	FPC Antenna
Wi-Fi 5GHz	3.21	/	3.21	FPC Antenna

6. CALCULATION RESULT OF MAXIMUM CONDUCTED POWER

The tuned conducted Average Power (declared by client)

Mode	Frequency (MHz)	Target Power (dBm)	Tolerance (dBm)	Lower Tolerance (dBm)	Upper Tolerance (dBm)
BT (GFSK)	2402-2480MHz	6	+2	4	8
BT (8DPSK)	2402-2480MHz	4	+2	2	6
802.11b	2412-2462MHz	11	+2	9	13
802.11g	2412-2462MHz	11	+2	9	13
802.11n HT20	2412-2462MHz	11	+2	9	13
802.11n HT40	2422-2452MHz	11	+2	9	13
Wi-Fi 5GHz(Band1)	5150-5250MHz	12	+2	10	14
Wi-Fi 5GHz(Band2)	5250-5350MHz	12	+2	10	14
Wi-Fi 5GHz(Band3)	5500-5725MHz	10	+2	8	12
Wi-Fi 5GHz(Band4)	5725-5850MHz	10	+2	8	12



The measured conducted Average Power

Mode	Frequency (MHz)	Averaged Power (dBm)
BT (GFSK)	2480	7.97
BT (8DPSK)	2480	5.01
802.11b	2437	12.37
802.11g	2437	12.78
802.11n HT20	2437	12.57
802.11n HT40	2437	12.34
Wi-Fi 5GHz(Band1)	5240	13.60
Wi-Fi 5GHz(Band2)	5310	13.60
Wi-Fi 5GHz(Band3)	5700	11.91
Wi-Fi 5GHz(Band4)	5825	10.67

FREQUENCY BAND (MHz)	MAX POWER (dBm)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/cm ²)	LIMIT (mW/cm ²)
Wi-Fi 2.4GHz	14	3.65	20	0.011581	1.0
Wi-Fi 5GHz	13	3.21	20	0.008312	1.0
BT 2.4GHz	6	2.88	20	0.001537	1.0

CONCLUSION

Both of the WLAN 2.4GHz and 5GHz can not transmit simultaneously.

--- END ---